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ABSTRACT OF THE DISCLOSURE

A method of printing a sub-resolution device feature having first and second edges spaced in close proximity to one another on a semiconductor substrate includes the steps of first depositing a radiation-sensitive material on the substrate, then providing a first mask image segment which corresponds to the first edge. The first mask image segment is then exposed with radiation using an imaging tool to produce a first pattern edge gradient. The first pattern edge gradient defines the first edge of the feature in the material.

A second mask image segment is then provided corresponding to the second feature edge. This second mask image segment is exposed to radiation to produce a second pattern edge gradient which defines the second edge of the feature. Once the radiation-sensitive material has been developed, the two-dimensional feature is reproduced on the substrate.